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**SYSTEM
ENGINEERING**

Project: Insert PJ

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR

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<i>Rev.</i>	<i>Date</i>	<i>Modification</i>
0	10/03/17	First Release

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FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR

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Commissioning in field

1. FTE pre-commissioning from remote (2 hours required)

This part can be done from remote or on field:

Action	How to attachment
1 Verify the system requirements	SE-TS027R00
2 Import device model	SE-TS031R00-ATT B
3 Enable “floating suction” optimization in pRack	SE-TS031R00-ATT C
4 Activate the function “floating suction”	SE-TS031R00-ATT D
5 Implement (but do not activate) the rules of the FTE2.0	SE-TS031R00-ATT E

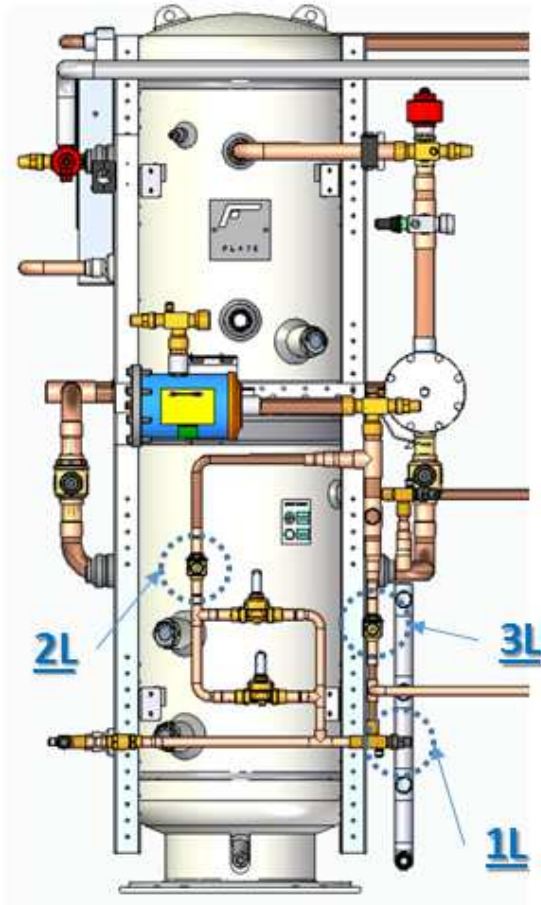
2. FTE commissioning in field (8 hours required)

This part has to be done in field with the FTE mechanically excluded (by-passed) from the system and empty (void):

1. Verify the status of the system, which specific focus on:
 - a. Verify the oil level inside the oil reservoir;
 - b. Verify the level of the liquid receiver;
 - c. Verify the alarm on the system;
 - d. Verify that the pressure switch for the LT compressor (discharge pressure) is pre-set at 38bar (+ 4,3 °C).
2. Switch ON the FTE2.0 controller;
3. If present, check if the probe AI2 is enable in the FTE2.0 controller: A2En = 1;
4. Enable se advanced function of FTE2.0: AdEn = 1;
5. Change the value of Pday:
 - a. = 4015 means infinite contract with EPTA SERVICE;
 - b. = between 1 and 4014 means the exact number of contract days with EPTA SERVICE;

- c. = 0 means no contract with EPTA SERVICE;
6. Put in pressure the receiver proceeding as follow:
 - a. Open valve 1a
 - b. Then open valve 2a and at the same time close valve 3a before start the overfeeding
 - c. Put in pressure the FTE (only from gas line). Open slowly the valve to avoid dry ice formation;
 - d. Excite the solenoid valves to break the void also in the liquid line between 2L and the solenoids;
7. After breaking the void, verify the value of pressure probe P1 to be sure that there are not leakages through the check valves (if installed) or the ball valves (closed position). The value that can be expected is the value of the suction pressure read in the pack main controller (the same pressure level of the suction line shall be expected, if not verify the check-valve of the FTE for leakage);

LIQUID BYPASS



SUCTION BYPASS

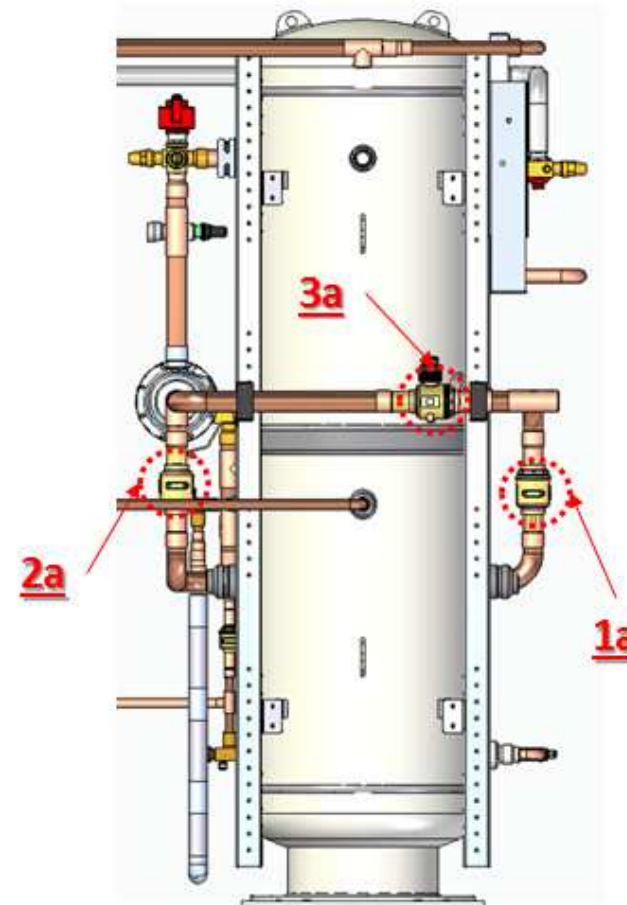


Figure 1 - Layout concept with by-pass for FTE connection

8. Electrically disconnect the solenoids (closed), open valve 2L and verify the value of pressure probe P1 to be sure that there are not leakages through the solenoids (the same pressure level of the suction line shall be expected, if not check the solenoid valves);
9. Reconnect the solenoids;
10. Open 1L and 2L and than close 3L (not vice versa);
11. Start to overfeed the system:
 - a. For each MT loads (cabinet and cold rooms) change the parameter MOP (maximum operating pressure) threshold to +1°C;
 - b. Increase the pressure switch for the MT compressors (suction pressure) at 41 bar (+ 7,2 °C).
 - c. For each MT loads put the parameter low superheating (P7) = -1K;
 - d. Decrease gradually the superheating of the MT loads:
 - i. Set the SH=7K, wait 10 minutes;
 - ii. Set the SH=5K, wait 10 minutes;
 - iii. Set the SH=1K.
12. Activate the FTE system manager rules (to decrease and increase SH);
13. Gradually charge the system with additional refrigerant:
 - a. Wait the low liquid sensor or the sight glass of the receiver highlight the fact that there is no liquid;
 - b. Start to add refrigerant: start with 10kg each 10 minutes (for the max of one cylinder);
 - c. Wait 30 minutes and check the status of the FTE liquid sensor:
 - i. If MLL is activated, stop adding refrigerant;
 - ii. Otherwise check the LLL on the receiver: if refrigerant is missing, adds more refrigerant.

Repeat the procedure until this equilibrium is obtained: the receiver doesn't show low liquid alarm and the level of liquid is between 30% and 50%.

As general rules it has to be expected an additional refrigerant charge between 30% and 50% of the volume of the FTE.

3. Post-commissioning (1 hours required)

This part shall be done in field with the FTE activated and running:

- Enable the FTE2.0 controller from “Site configuration” menu;
- Increase the main liquid receiver pressure set-point (parameter *L1 - RPRV valve regulation set point*) to 36bar (or up to 37bar if receiver pressure is smooth and stable);
- Schedule of the defrost must be done taking into account the MT and LT loads:
 - LT defrost must not be scheduled after a MT defrost;
- Starting open degree of the loads expansion valve (*cP1 parameter*) shall be increased to accelerate the evaporator overfeeding (suggested value: 60% starting opening degree);
- Set the gas cooler minimum condensing pressure (*HPV_Min_Setp_Work*) at 45bar (instead of the standard 40bar). Change the set-point only if the evaporation temperature of the MT cabinet is above -5°C (to maintain the compressors inside the envelope);
- Increase the liquid injection set-point (AKV intervention) values from 20K to 30K;
- Reduce the parameter of the hot gas injection (suggested value: 5K with 3K differential);
- Check the oil level in the reservoir and eventually add oil to the system if missing. It is suggested to verify the status of the oil reservoir after one week;
- Decrease the alarm of low superheat in suction line to 3K. Set the delay of alarm to 60 seconds;

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: IMPORT DEVICE MODEL

<i>Rev.</i>	<i>Date</i>	<i>Modification</i>
0	10/03/17	First Issue

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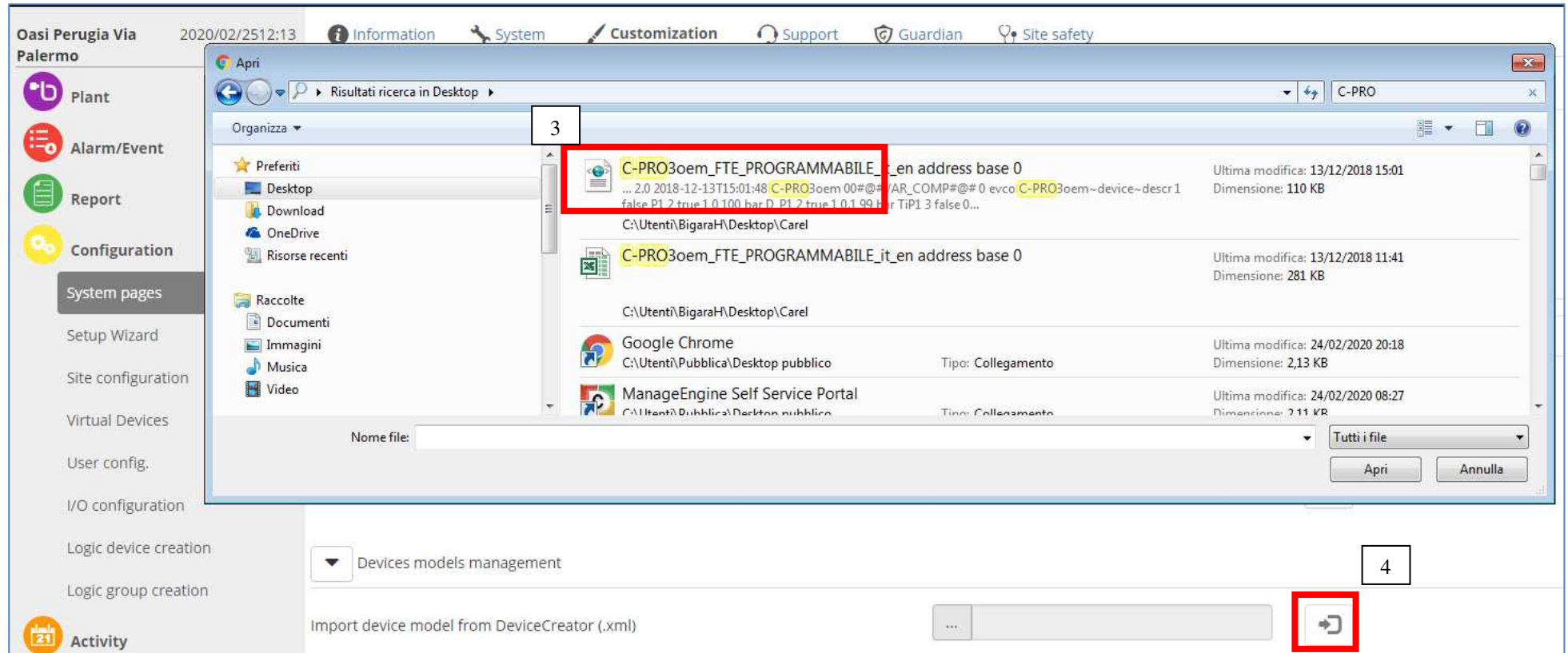
FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Import device model

How import model for FTE2.0 in Boss:

The screenshot shows the software interface for 'Oasi Perugia Via Palermo' on 2020/02/25 11:56. The top navigation bar includes 'Information', 'System', 'Customization', 'Support', 'Guardian', and 'Site safety'. The left sidebar contains a menu with 'System pages' highlighted by a red box and labeled '1'. The main content area is divided into sections: 'Export site configuration', 'Import maps', and 'Devices models management'. The 'Devices models management' section contains the row 'Import device model from DeviceCreator (.xml)', where a file selection button (three dots) is highlighted by a red box and labeled '2'. Other rows in this section include 'Export device model in XML' and 'Delete device model'.

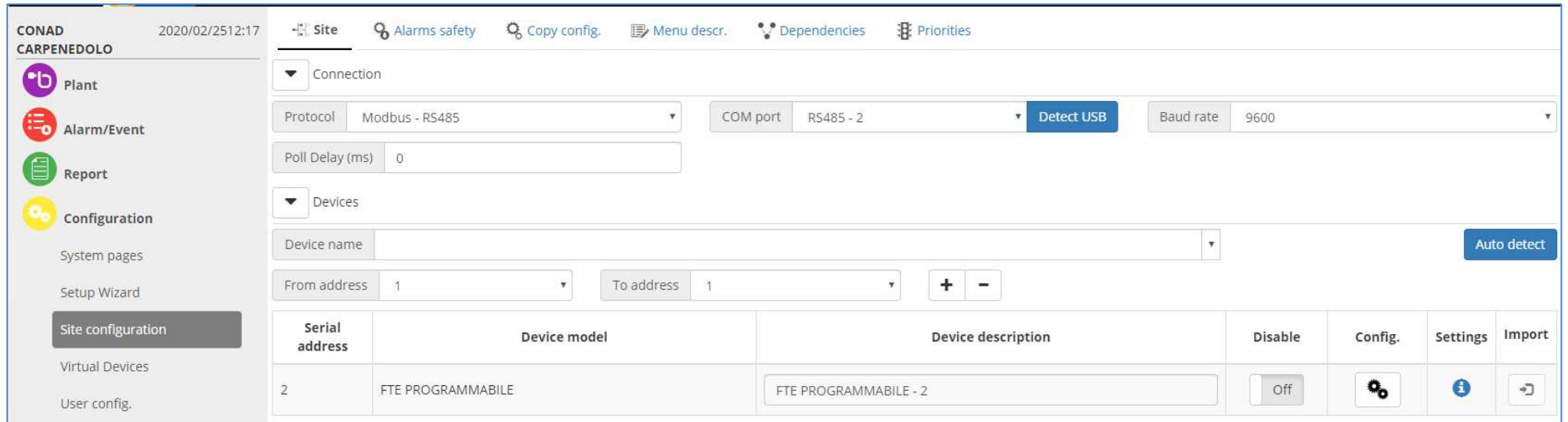
FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Import device model

Select the file and imported:






FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Import device model

Create the dedicated Modbus line for FTE2.0 and import the device previously imported:



The screenshot shows the configuration interface for a site named 'CONAD CARPENEDOLO'. The left sidebar contains navigation options: Plant, Alarm/Event, Report, Configuration, System pages, Setup Wizard, Site configuration (highlighted), Virtual Devices, and User config. The main area is titled 'Site' and includes tabs for Alarms safety, Copy config., Menu descr., Dependencies, and Priorities. Under the 'Connection' section, the following settings are visible: Protocol: Modbus - RS485, COM port: RS485 - 2, Baud rate: 9600, and Poll Delay (ms): 0. There is a 'Detect USB' button. Under the 'Devices' section, there is a 'Device name' dropdown, an 'Auto detect' button, and fields for 'From address' (1) and 'To address' (1) with '+' and '-' buttons. Below this is a table of devices:

Serial address	Device model	Device description	Disable	Config.	Settings	Import
2	FTE PROGRAMMABILE	FTE PROGRAMMABILE - 2	Off			

→ CONTACT SYSTEM ENGINEERING DEPT. FOR THE “.xlm” DEVICE MODEL.

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: ENABLE “FLOATING SUCTION” IN PRACK

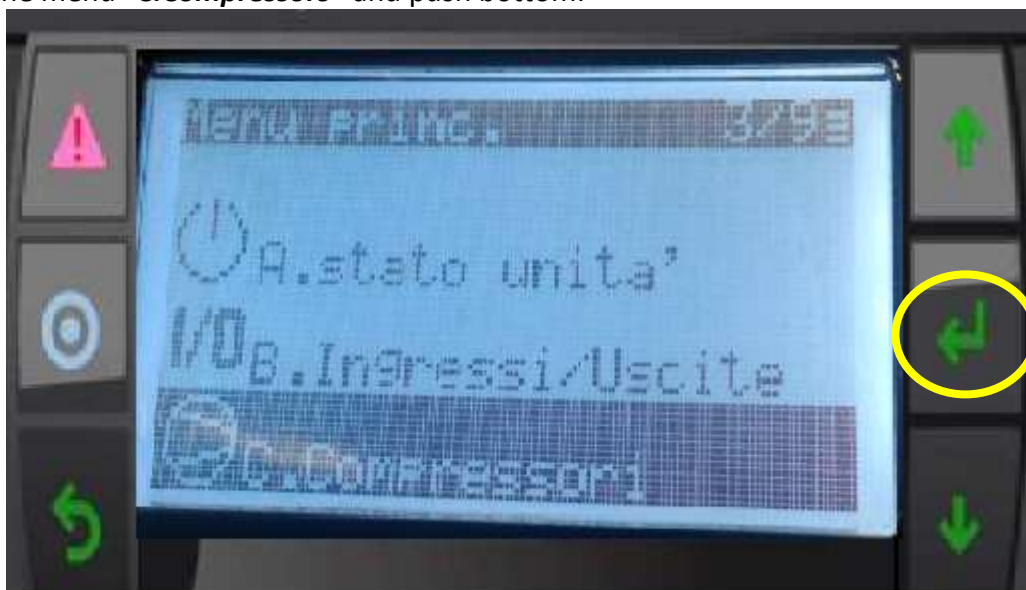
<i>Rev.</i>	<i>Date</i>	<i>Modification</i>
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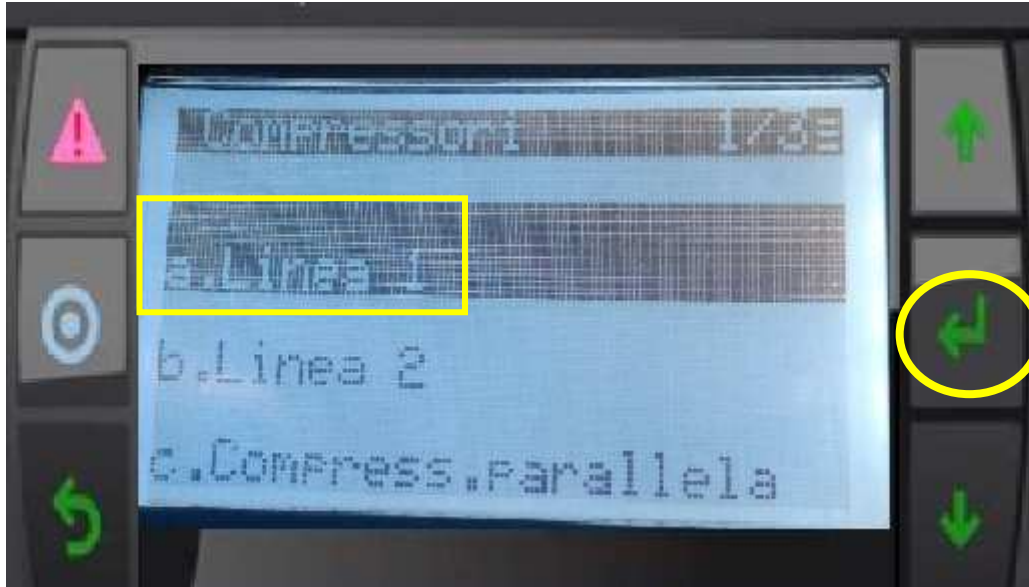
1. This procedure must be done in front of the pRack in field
2. From the main menu of pRack push the bottom:



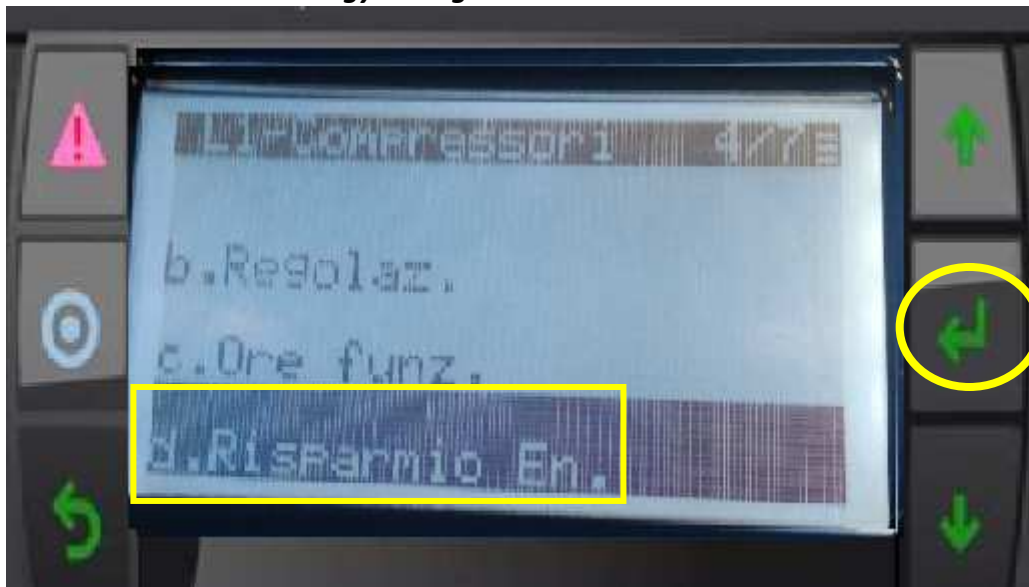
3. Choose the menu "C.Compressors" and push bottom:



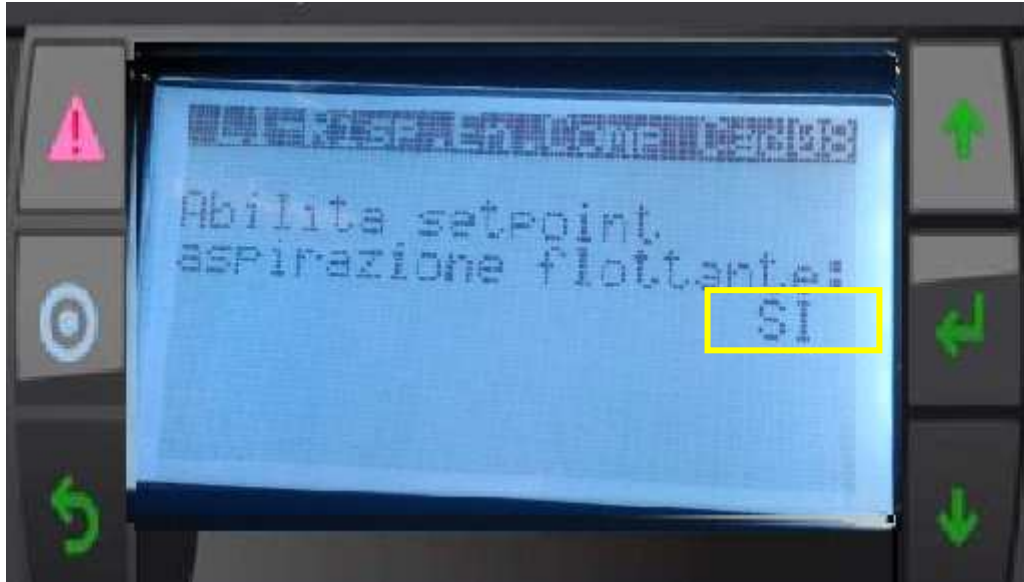
4. Select "a.Line 1" and push the bottom:



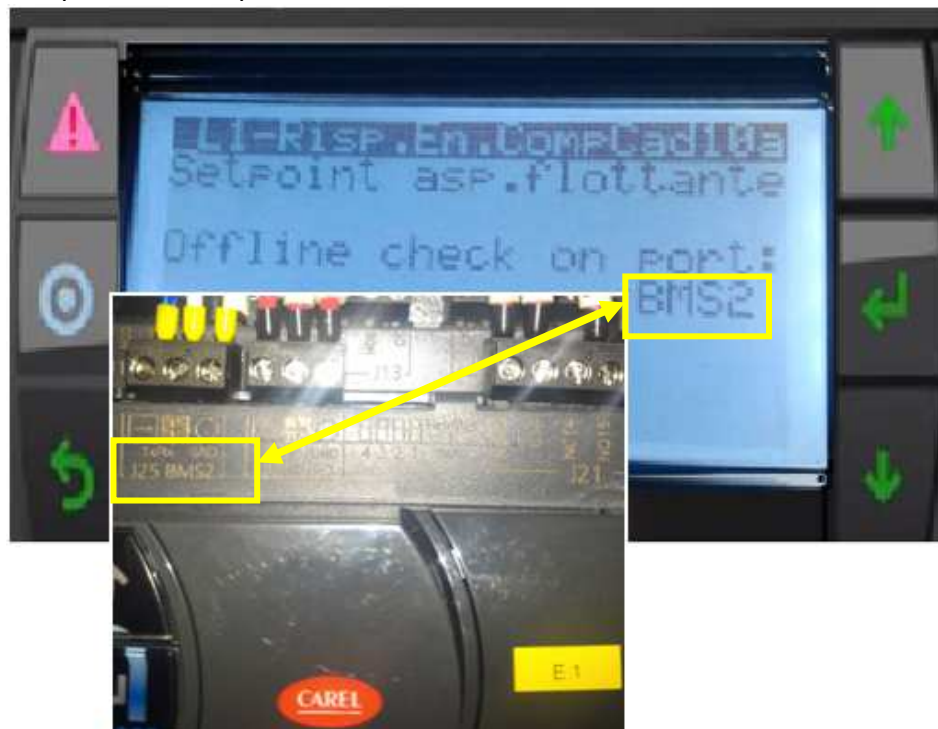
5. Down with the arrow until "d. Energy saving" and enter in the menu:



6. Search "Enable setpoint floating suction" and select YES:



7. Verify the correspondence on port:



Check. Port BMS if external RS485 is in slot BMS card, port BMS2 if RS485 is inside de PVPRO.

8. Repeat the procedure for "Line 2"

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: ACTIVATE THE FUNCTION “FLOATING SUCTION”

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FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

- From the menu “Plant” click on “Devices”. Select “pRack Transcritical”.
In tab “Parameters” select “All parameters” and for the Transcritical Pack change the following parameter with the values below:

	VALUE	NAME OF PARAMETER	DESCRIPTION OF THE PARAMETER
L1	1 (*)	Float_Setp_Comp_En_L1	L1 - Enable floating suction setpoint
	0,1	Float_Setp_Comp_Max_Delta_L1	L1 - Maximum delta admitted for floating suction
	1	Float_Setp_Comp_Reduce_Time_L1	L1 - Floating suction setpoint time reduction
	26,5	Comp_Float_Min_Setpoint_L1	L1 - Floating suction minimum setpoint
	30	Comp_Float_Max_Setpoint_L1	L1 - Floating suction maximum setpoint

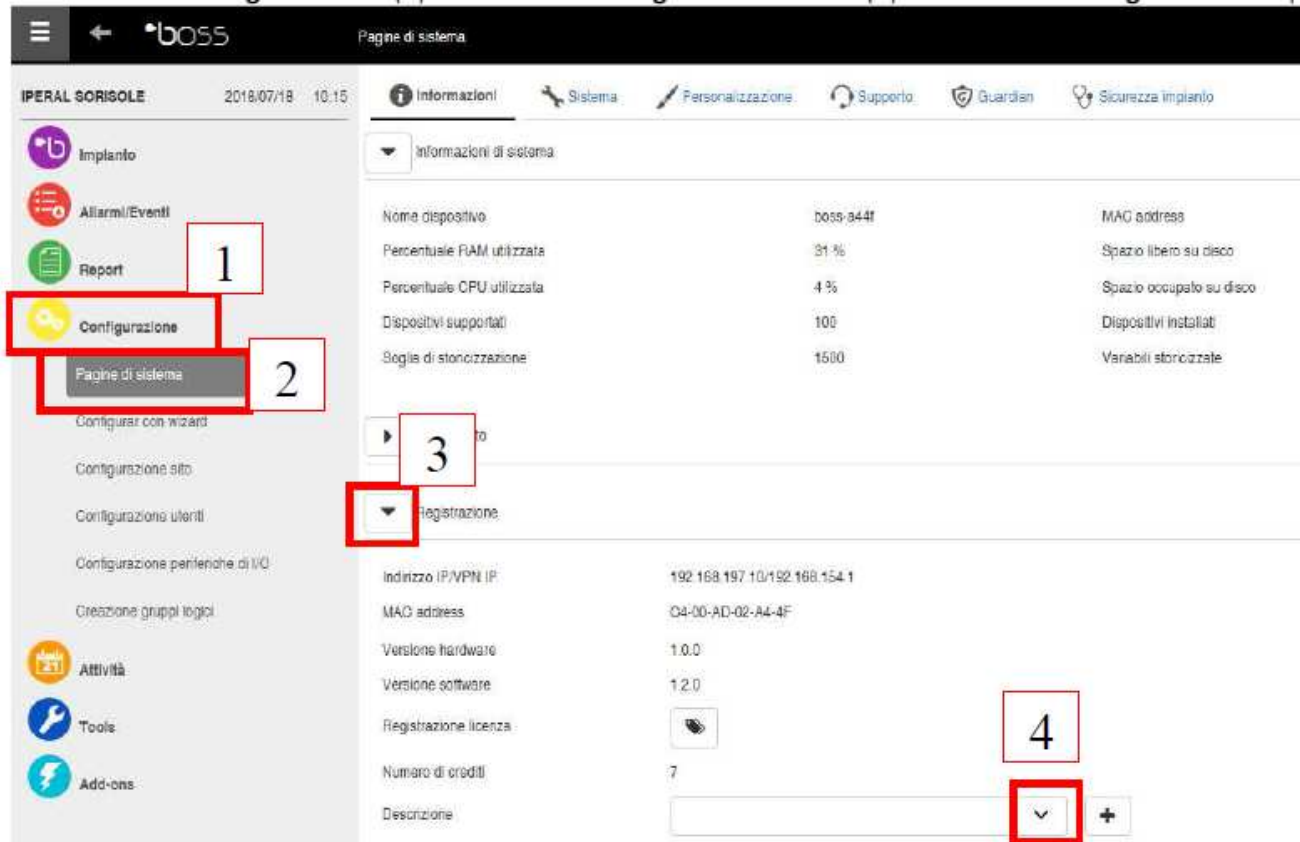
L2	1 (*)	Float_Setp_Comp_En_L2	L2 - Enable floating suction setpoint
	0,1	Float_Setp_Comp_Max_Delta_L2	L2 - Maximum delta admitted for floating suction
	1	Float_Setp_Comp_Reduce_Time_L2	L2 - Floating suction setpoint time reduction
	12	Comp_Float_Min_Setpoint_L2	L2 - Floating suction minimum setpoint
	14	Comp_Float_Max_Setpoint_L2	L2 - Floating suction maximum setpoint

(*) Attention: when the floating suction is enable, if in the pRack is set the correct door (see att C), the suction set-points on pack goes immediately to the values set in parameter:

- “L1 - Floating suction minimum setpoint” for MT e
- “L2 - Floating suction minimum setpoint” for LT.

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

2. For **BOSS** follow the instruction below in order to activate the plug-in “floating suction” on Supervisor



In point 4. choose “Floating suction”.

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

3. Log-in and log-out.
 - On BOSS the floating suction will be in “Add-ons” menu
 - On PVpro the floating suction will be in “Energy” menu
4. On **“Floating Suction Pressure”** and then **tab “Racks”**
Flag “Enable” for L1 AND for L2.
Then save.
5. From the menu **“Energy”** click on **“Floating Suction Pressure”** and then **tab “Association”**.
Select the concerned cabinet from “All Utilities” to “Rack Utilities” for L1.
Flag “Smooth lines control” and then save.
Repeat the same operation for L2.

WARNING. The Smooth lines control can be activated only for MXPRO version 3.2 and later. If there are devices with older version, exclude them to the list for floating suction pressure.

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function "floating suction"

Principale Associazione Centrali

Salva

Centrali	Numero di utenze collegate	Funzione Smooth lines
[03-TR-100] centrale frigo Transcritica - 100 (L1 - Setpoint di aspirazione flottante)	27	x
[03-TR-100] centrale frigo Transcritica - 100 (L2 - setpoint di aspirazione flottante)	6	x

Centrale selezionata [03-TR-100] centrale frigo Transcritica - 100 (L1 - Setpoint di aspirazione flottante) Funzione Smooth lines

Associazione

Utenze libere

[05-NA-NA] sottoraffreddatore - 103

Utenze collegate

- [01-NA-100] murale latticini granvista - 10
- [01-NA-100] murale latticini granvista - 11
- [01-NA-100] murali latticini granvista - 12
- [01-NA-100] murale latticini granvista - 13
- [01-NA-100] murale frutta lion - 30
- [01-NA-100] murale frutta lion - 31
- [02-NA-100] cella gastronomia - 81
- [02-NA-100] cella carni rosse - 82
- [02-NA-100] cella carni bianche - 83
- [02-NA-100] cella pescheria cozze e mitili - 84
- [02-NA-100] pescheria - 85
- [01-NA-100] isola latticini keplero - 76
- [01-NA-100] isola latticini keplero - 77
- [01-NA-100] isola pescheria keplero - 70

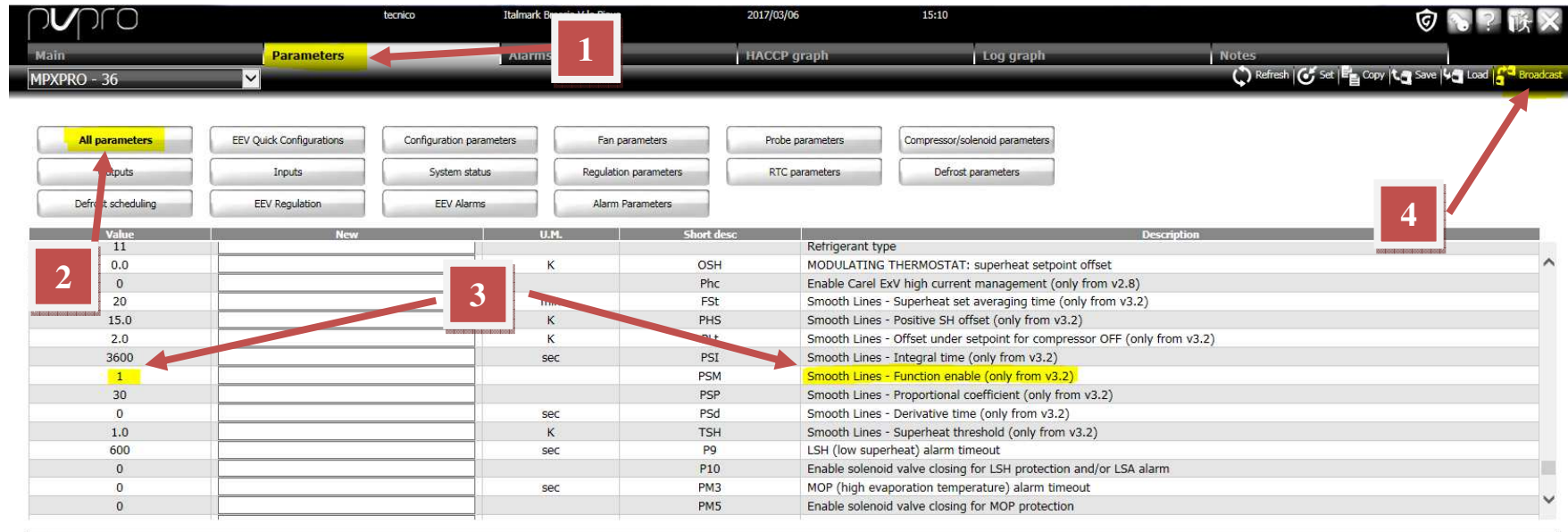
Impianto Allarmi/Eventi Report Configurazione Attività Energia

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

- From the menu **“Plant”** click on **“Devices”** and choose one of the interested cabinets.
Select the menu **“Parameters”**, then **“All parameters”**.
Enable the parameter **“Smooth Lines – Function enable (only from v3.2)”** with the value **“1”**.
Click on **“Broadcast”** to extend that value to the all the other interested cabinet.

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

ENABLE THE PSM PARAMETER ON THE CABINETS AND COLD ROOM WHEN THE FLOATING SUCTION WILL BE ENABLE: THE DAY OF THE COMMISSIONING.



Value	New	U.M.	Short desc	Description
11				Refrigerant type
0.0		K	OSH	MODULATING THERMOSTAT: superheat setpoint offset
0			Phc	Enable Carel ExV high current management (only from v2.8)
20		min	FSt	Smooth Lines - Superheat set averaging time (only from v3.2)
15.0		K	PH5	Smooth Lines - Positive SH offset (only from v3.2)
2.0		K	DLT	Smooth Lines - Offset under setpoint for compressor OFF (only from v3.2)
3600		sec	PSI	Smooth Lines - Integral time (only from v3.2)
1			PSM	Smooth Lines - Function enable (only from v3.2)
30			PSP	Smooth Lines - Proportional coefficient (only from v3.2)
0		sec	PSd	Smooth Lines - Derivative time (only from v3.2)
1.0		K	TSH	Smooth Lines - Superheat threshold (only from v3.2)
600		sec	P9	LSH (low superheat) alarm timeout
0			P10	Enable solenoid valve closing for LSH protection and/or LSA alarm
0		sec	PM3	MOP (high evaporation temperature) alarm timeout
0			PM5	Enable solenoid valve closing for MOP protection

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

7. In menu “Energy” → “Floating Suction Pressure” and enter in “L2 – Floating suction set point”

Global view of Floating Suction Pressure Control status. Clicking on a rack is possible to display in detail the rack status. With button START and STOP it is possible to start or to stop the plugin.

Plugin status

FSP - Suction pressure optimization running

Rack	Current setpoint	Smooth lines control
pRack pR300T Transcritical - 196 (L2 - Floating suction setpoint)	13.9 barg/psig/°C/°F	14.0 barg/psig/°C/°F
pRack pR300T Transcritical - 196 (L1 - Floating suction setpoint)	28.9 barg/psig/°C/°F	29.0 barg/psig/°C/°F

Bottom navigation bar: Plant, Alarm/Event, Report, Configuration, Activity, Energy

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

8. On tab “Parameters”, flag Set all TSHs to value “1” K and “Save”. Repeat for “L1 – Floating suction set point”

Configuration

Current setpoint: 28.1 barg/psig/°C/°F

Minimum setpoint: 28.0 barg/psig/°C/°F

Maximum setpoint: 30.0 barg/psig/°C/°F

Gradient: 0.1 barg/psig/°C/°F

Sample period: 20 min

Maximum warning utilities (yellow): 4

Maximum critical utilities (orange): 2

Maximum overloaded utilities (red): 2

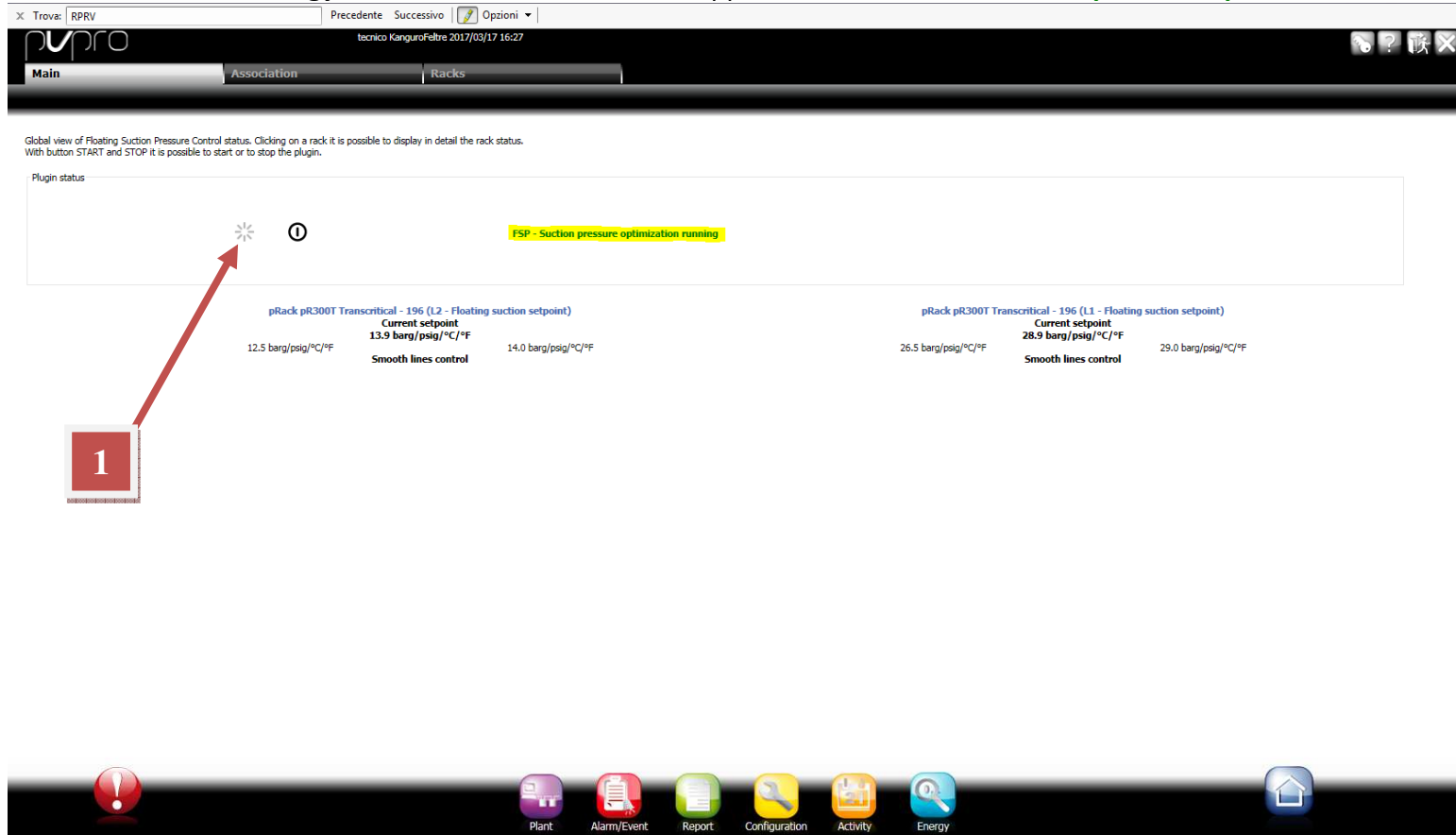
Utility

Utility	Line	Address	TSH
MPXPRO v4 (MX*) - 3	1	003	0.5
MPXPRO v4 (MX*) - 4	1	004	0.5
MPXPRO v4 (MX*) - 5	1	005	0.5
MPXPRO v4 (MX*) - 6	1	006	0.5
MPXPRO v4 (MX*) - 7	1	007	0.5
MPXPRO v4 (MX*) - 8	1	008	0.5
MPXPRO v4 (MX*) - 9	1	009	0.5
MPXPRO v4 (MX*) - 10	1	010	0.5
MPXPRO v4 (MX*) - 11	1	011	0.5
MPXPRO v4 (MX*) - 12	1	012	0.5
MPXPRO v4 (MX*) - 13	1	013	0.5
MPXPRO v4 (MX*) - 14	1	014	0.5
MPXPRO v4 (MX*) - 15	1	015	0.5
MPXPRO v4 (MX*) - 17	1	017	0.5
MPXPRO v4 (MX*) - 18	1	018	0.5

Set all TSHs: 1 K

FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Activate the function “floating suction”

9. Activate the function in menu “Energy”, tab “Main”. If is all ok, will appear the tense “**FSP - Suction pressure optimization running**”



FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: IMPLEMENT THE RULES TO INCREASE AND DECREASE SH WHEN HLL IS EXCEEDED

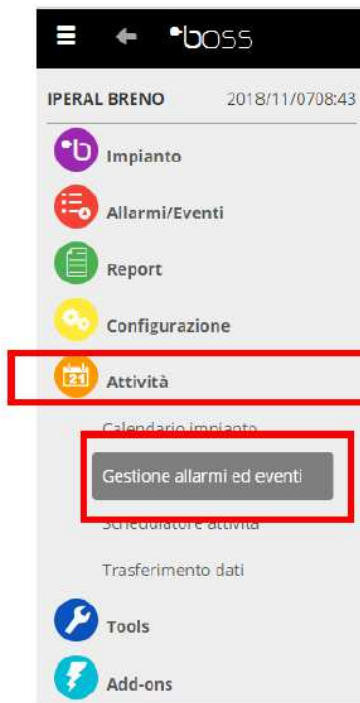
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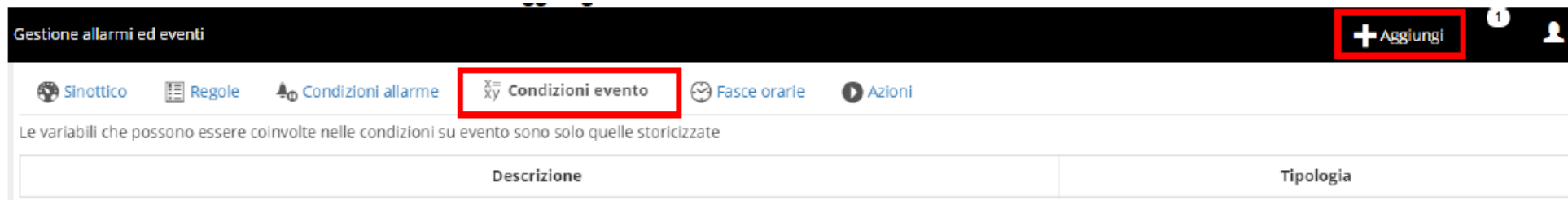
1. [CREATE EVENT / RULE / ACTION FOR DECREASE THE SUPERHEAT OF THE MT LOADS](#)

1.1 Create the **EVENT** Manovra Abbassamento:

1.1.1 from the menu “**Activity**” → “**Alarms and events management**”



1.1.2 Positioning on tab “Event conditions” and click on “Add”



Gestione allarmi ed eventi + Aggiungi

Sinottico Regole Condizioni allarme **Condizioni evento** Fasce orarie Azioni

Le variabili che possono essere coinvolte nelle condizioni su evento sono solo quelle storicizzate

Descrizione	Tipologia
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1.1.3 Complete the “Event Condition” for DECREASE SUPERHEAT with the following information and description. After click on “Save”

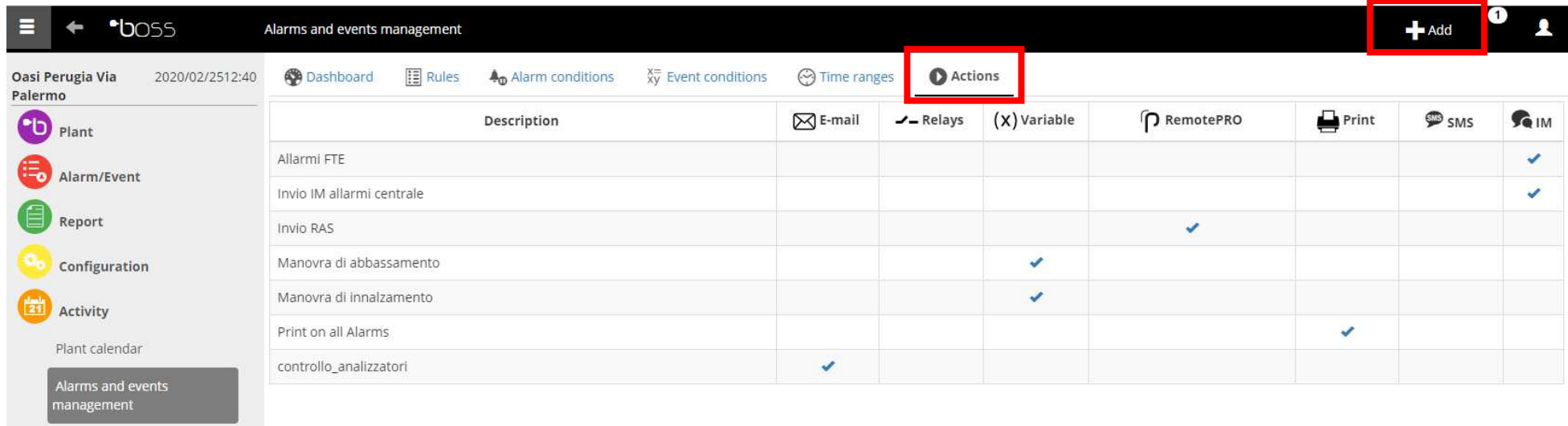
Gestione allarmi ed eventi - Edit ✕ Cancel ✓ Salva 2 

Condizione

Descrizione:	<input type="text" value="Manovra di Abbassamento"/> *		
Dispositivo:	<input type="text" value="[00-NA-NA] FTE 2.0 - 2"/> *	Variabile:	<input type="text" value="SHdW Stato Richiesta /Stato Richiesta decremento surriscaldamenti"/> *
Operazione:	<input type="text" value="EQUALS"/>	su:	<input type="button" value="Variabile"/> <input type="button" value="Costante"/>
Valore:	<input type="text" value="1"/>		

1.2 Create the **ACTION** for DECREASE SUPERHEAT

1.2.1 In menu “**Activity / Alarms and events management**” go on tab “**Actions**” and add a new action

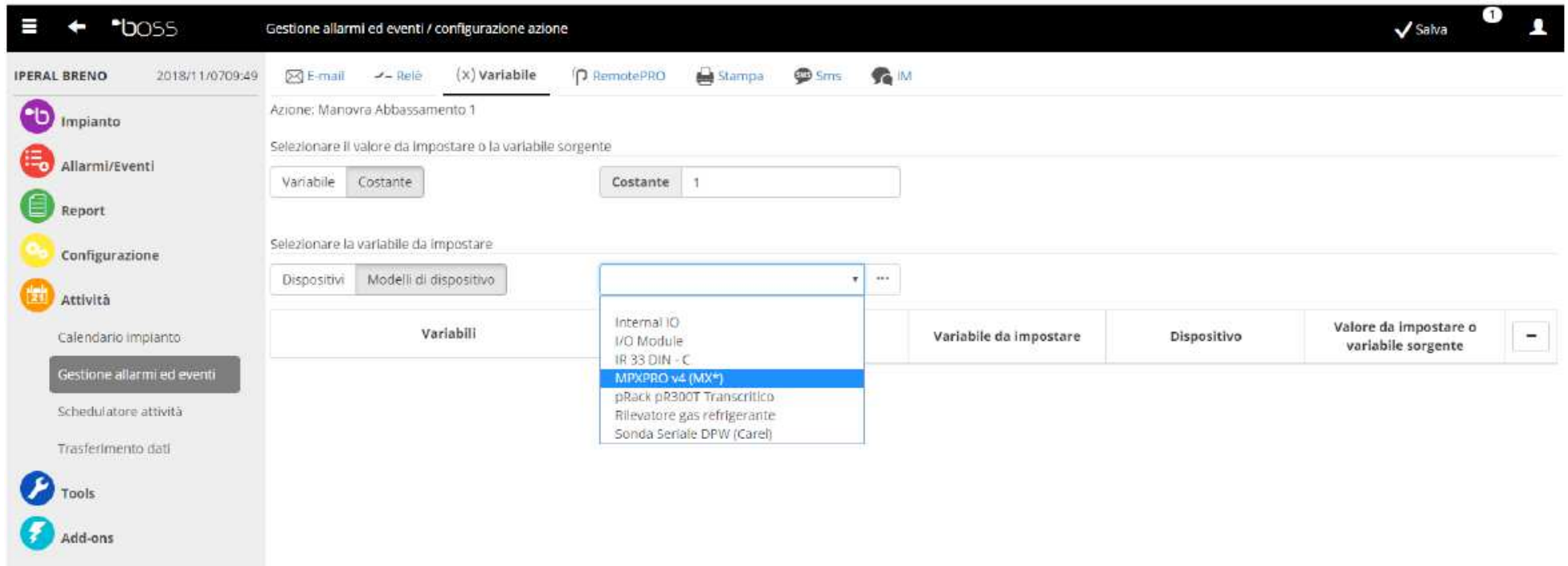


Oasi Perugia Via Palermo 2020/02/25 12:40

Dashboard Rules Alarm conditions Event conditions Time ranges **Actions**

Description	E-mail	Relays	(X) Variable	RemotePRO	Print	SMS	IM
Allarmi FTE							✓
Invio IM allarmi centrale							✓
Invio RAS				✓			
Manovra di abbassamento			✓				
Manovra di innalzamento			✓				
Print on all Alarms					✓		
controllo_analizzatori	✓						

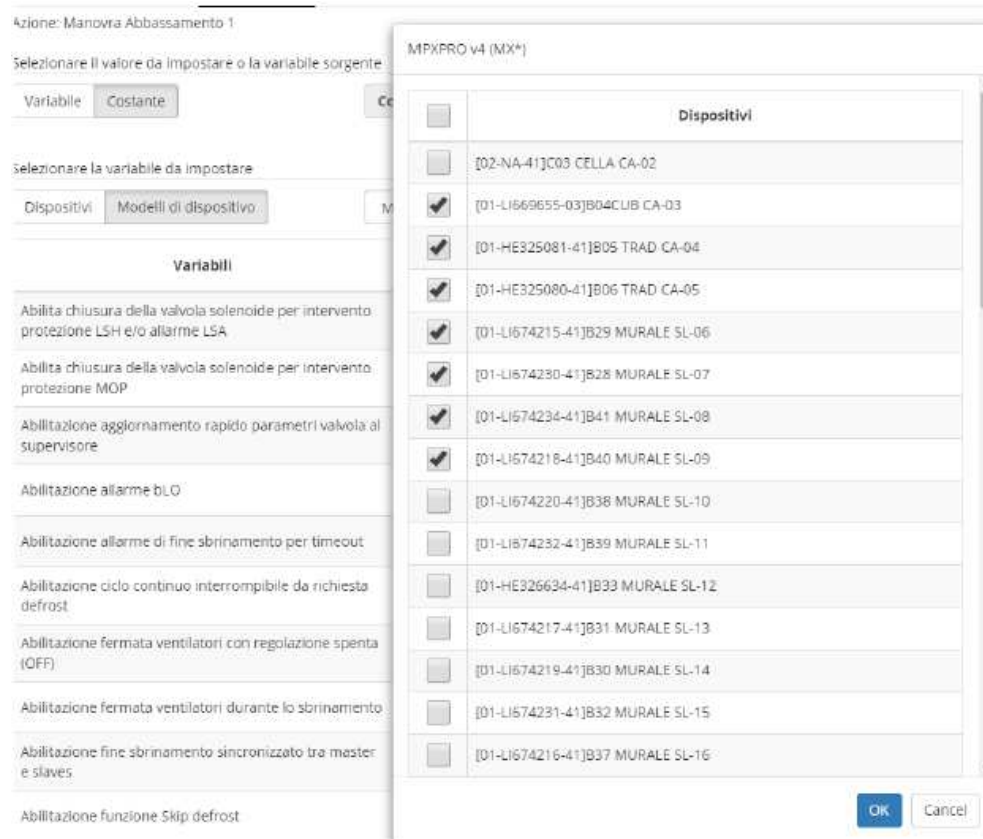
1.2.2 Double click on the new action created. Move on tab “Variable”




The screenshot shows the BOSS web interface for configuring an alarm action. The breadcrumb is "Gestione allarmi ed eventi / configurazione azione". The action is named "Manovra Abbassamento 1". The configuration is set to "Variable" with a constant value of "1". A dropdown menu is open under "Modelli di dispositivo", listing several variables: "Internal IO", "I/O Module", "IR 33 DIN - C", "MPXPRO v4 (MX*)", "pRack pR300T Transcrittico", "Rilevatore gas refrigerante", and "Sonda Seriale DPW (Carel)".

Variabili	Variable da impostare	Dispositivo	Valore da impostare o variabile sorgente
Internal IO			
I/O Module			
IR 33 DIN - C			
MPXPRO v4 (MX*)			
pRack pR300T Transcrittico			
Rilevatore gas refrigerante			
Sonda Seriale DPW (Carel)			

1.2.3 Selected MT cabinet and change the Variable “Superheating set-point” with the Costant = 1:



FTE 2.0 - COMMISSIONING WITH CAREL SUPERVISOR: Implement the rules to increase and decrease SH when HLL is exceeded

Gestione allarmi ed eventi / configurazione azione ✓ Salva 1 

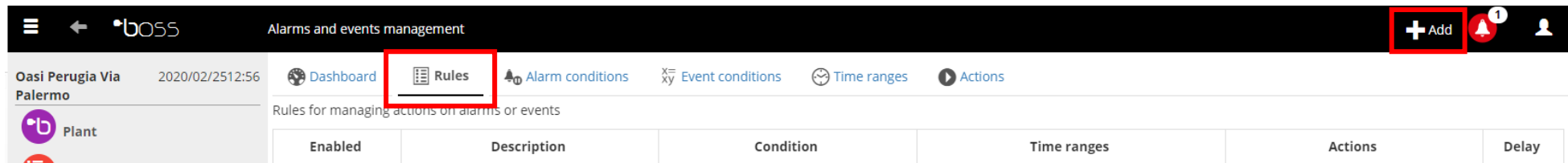
E-mail Relè (X) Variabile RemotePRO Stampa Sms IM

Variabili	+	Dispositivo	Variabile da impostare	Dispositivo	Valore da impostare o variabile sorgente	-
Abilita chiusura della valvola solenoide per intervento protezione LSH e/o allarme LSA	+	[01-LI669655-03]B04CUB CA-03	Setpoint surriscaldamento		1	-
Abilita chiusura della valvola solenoide per intervento protezione MDP	+	[01-HE325081-41]B05 TRAD CA-04	Setpoint surriscaldamento		1	-
Abilitazione aggiornamento rapido parametri valvola al supervisore	+	[01-HE325080-41]B06 TRAD CA-05	Setpoint surriscaldamento		1	-
Abilitazione allarme bLO	+	[01-LI674215-41]B29 MURALE SL-06	Setpoint surriscaldamento		1	-
Abilitazione allarme di fine sbrinamento per timeout	+	[01-LI674230-41]B28 MURALE SL-07	Setpoint surriscaldamento		1	-
Abilitazione ciclo continuo interrompibile da richiesta defrost	+	[01-LI674234-41]B41 MURALE SL-08	Setpoint surriscaldamento		1	-
Abilitazione fermata ventilatori con regolazione spenta (OFF)	+	[01-LI674218-41]B40 MURALE SL-09	Setpoint surriscaldamento		1	-

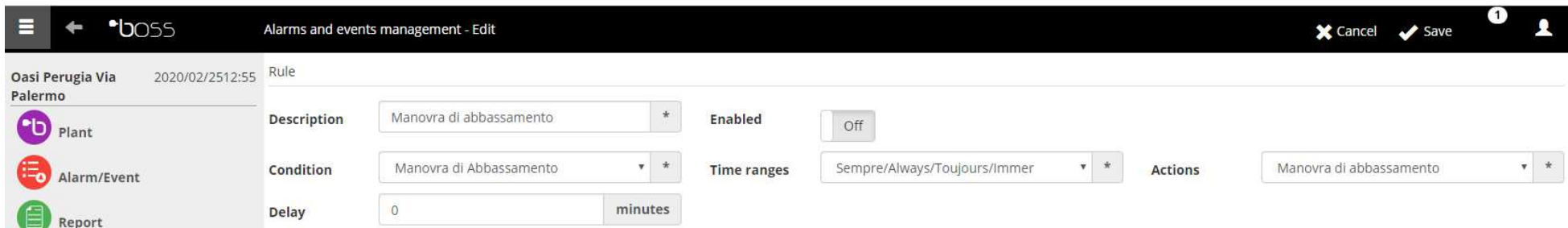
At the end of the operation, when all the cabinet chosen have been inserted **click on “Save”**.

1.3 Create the **RULES** Manovra Abbassamento

1.3.1 From the menu “Activity” and “Alarms and events management”, move on tab “**Rules**” click on “**Add**” e named the rule “**Manovra di Abbassamento**” and complete the Rule with the information as below. “Condition” and “Action” of that rule are the previously named “**Manovra Abbassamento**”



The screenshot shows the BOSS interface for 'Alarms and events management'. The 'Rules' tab is selected and highlighted with a red box. The 'Add' button is also highlighted with a red box. The interface displays a table for managing rules with columns: Enabled, Description, Condition, Time ranges, Actions, and Delay.



The screenshot shows the 'Rule' configuration form in the BOSS interface. The 'Description' field is set to 'Manovra di abbassamento'. The 'Condition' is set to 'Manovra di Abbassamento'. The 'Time ranges' are set to 'Sempre/Always/Toujours/Immer'. The 'Actions' are set to 'Manovra di abbassamento'. The 'Enabled' toggle is currently set to 'Off'.

DON'T ENABLE THE RULE

At the end of the operation, click on “**Save**”

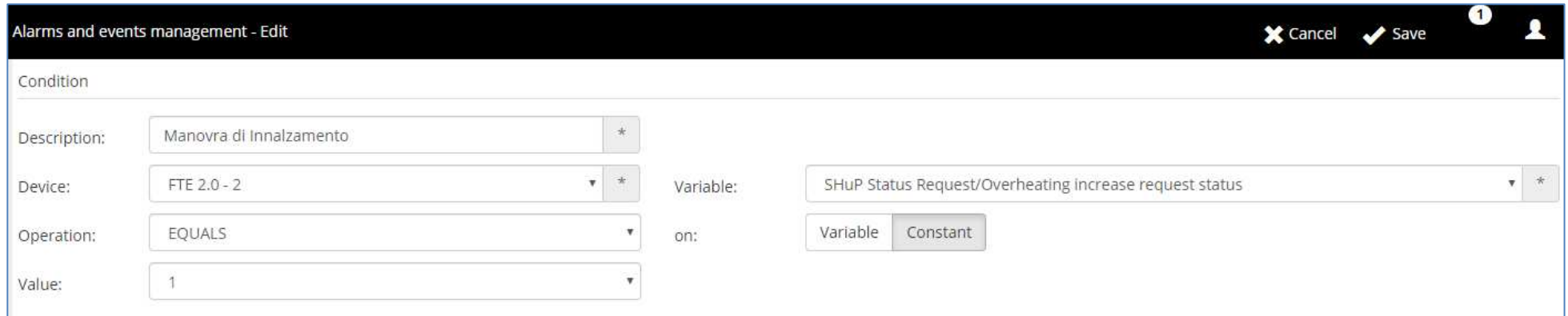
2. CREATE EVENT / RULE / ACTION FOR RAISING THE SUPERHEATING OF THE MT LOADS IDENTIFIED:

2.1 Create the **EVENT** Manovra Innalzamento:

2.1.1 From the menu “**Activity**” → “**Alarms and events management**”

2.1.2 Positioning on tab “**Event conditions**” and click on “**Add**”, name the condition of the event as “**Manovra di Innalzamento**”

2.1.3 Complete the “Event Condition” with the following information and description. After click on “**Save**”



The screenshot shows the 'Alarms and events management - Edit' window. The 'Condition' section is active, with the following fields filled:

- Description: Manovra di Innalzamento
- Device: FTE 2.0 - 2
- Operation: EQUALS
- Value: 1
- Variable: SHuP Status Request/Overheating increase request status
- on: Variable

Buttons for 'Cancel', 'Save', and a user profile icon are visible in the top right corner.

2.2 Create the **ACTION** named Manovra Innalzamento (=Raising Maneuver)

2.2.1 From the menu **“Activity / Alarms and events management”** go on tab **“Actions”**

2.2.2 Click on **“Add”** and named the action **“Manovra Innalzamento”**:

2.2.3 Double click on the new action created. Move on tab **“Variable”**

2.2.4 For the same previous MT cabinet change the Variable **“Superheating set-point”** with the Costant = 7
At the end of the operation, when all the cabinet chosen have been inserted **click on “Save”**.

2.3 Create the **RULES** Manovra Innalzamento

2.3.1 From the menu “Activity” and “Alarms and events management”, move on tab “**Rules**” click on “**Add**” e named the rule “**Manovra di Innalzamento**” and complete the Rule with the information as below. “Condition” and “Action” of that rule are the previously named “**Manovra Innalzamento**”.

DON'T ENABLE THE RULE

At the end of the operation, click on “**Save**”

The created rules will be visible in TAB “Dashboard”